

# 3rd International Congress On Mobile Devices And Seizure Detection In Epilepsy

October 28 - 30, 2021 Copenhagen, Denmark

## October 28, 2021

Pre-congress workshop on home video-EEG monitoring (Chairs: Mark Richardson and Franz Brunnhuber).  
See preliminary program in separate file.

## October 29, 2021

**08:00-08:10 [Welcome](#) (Sándor Beniczky & Philippe Ryvlin)**

**08:10-10:00 Automated seizure detection using non-invasive devices: Which device for which patient? (Chair: Frans Leijten)**

- 08:10-08:40. [Andreas Schulze-Bonhage](#) (Germany): Limited yield of in-patient video-EEG monitoring to document ictal events
- 08:40-09:10. [Anouk van Westrhenen](#) (The Netherlands): What needs do parents/caregivers have, coping and how devices fit.
- 09:10-09:40. [Anouk Uiterwijk](#) (The Netherlands): Counseling on medical devices in epilepsy – an outpatient strategy.
- 09:40-10:00. [Lauren Swinnen](#) (Belgium): Accurate detection of typical absence seizures using a two-channel EEG wearable behind the ears
- [Q&A session](#)

**10:00-10:30 Coffee break in exhibition area**

**10:30-12:30 New devices: Is there a disruptor? (Chair: Philippe Ryvlin)**

- 10:30-10:45. [Philippe Ryvlin](#): Why do we need new devices
- 10:45-11:20. [Geert Langereis](#) (The Netherlands): The future of wearable technology.
- 11:20-11:55. [Tomas Teijeiro](#) Campo (Switzerland): Innovative seizure detection systems.
- 11:55-12:30. Troels Kjær (Denmark) – **recording not available due to patient privacy**: Ultralongterm recordings with subcutaneous EEG: state of the art.

**12:30-14:00 Poster session and lunch break in exhibition area**

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## 14:00-15:15 Sponsored session (UNEEG)

### Ultra Long-term EEG Monitoring - Real world clinical experience (Chair: [Jonas Duun-Henriksen](#), Denmark)

- Prof [Michel van Putten](#), Medisch Spectrum Twente (NL)
- Prof [Richardson](#), Kings College Hospital (UK)
- Prof [Troels W Kjaer](#), University Hospital Zealand (DK)
- [Q&A](#)

## 15:15-15:30 Coffee break in exhibition area

## 15:30-16:45 EEG devices / Panel session (Chair: Michael Sperling)

- 15:30-15:45. [Matthias Dümpelmann](#) (Germany): An Optimized EEG-Based Seizure Detection Algorithm for Long-term Low-Channel Recordings
- 15:45-16:00. [Pedro Viana](#) (United Kingdom): Template matching spike detection in ultra long-term subcutaneous EEG
- 16:00-16:15. [Jonathan Dan](#) (Belgium): Automatic electrode selection in wearable electroencephalography for tele-monitoring of people with epilepsy
- 16:15-16:30. [Marleen Tjepkema](#) (Netherlands): Predicting efficacy of neuromodulation in epilepsy
- 16:30-16:45. [Manfred Hartmann](#) (Austria): Two-channel seizure detection with deep learning.

## 16:45-17:15 Coffee break in exhibition area

## 17:15-18:15 Extending the spectrum of applications (Chair: Sándor Beniczky)

- 17:15-17:30. [Sándor Beniczky](#) (Denmark): Wearable EEG for absence seizure detection: prospective validation study.
- 17:30-17:45. [Jukka Peltola](#) (Finland): Clinical utility of a video/audio-based epilepsy monitoring system Nelli.
- 17:45-18:00. [Jesper Jeppesen](#) (Denmark): Seizure detection using subcutaneous ECG in home monitoring; a prospective, proof-of-concept study
- 18:00-18:15. [Borbála Hunyadi](#) (Belgium): The power of ECG in multimodal patient-specific seizure monitoring: Added value to an EEG-based detector using limited channels.

## 18:30-19:30 Future research and development: in the aftermath of the clinical practice guideline on seizure detection - [Panel discussion](#)

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**08:00-10:15**

## **Seizure prediction: are we there yet? (Chair: Maxime Baud)**

- 08:00-08:15. [Mark Cook](#) (Australia): Why we need seizure prediction and what we can already accomplish – introduction to the session.
- 08:15- 08:50. [Maxime Baud](#) (Switzerland): Personalized seizure risk forecasting (IS)
- 08:50-09:25. [Philippa Karoly](#) (Australia): Multiday cycles in brain and heart (IS)
- 09:25-09:50. [Benjamin Brinkmann](#) (United States): Seizure Forecasting using long-short term memory deep learning with a wrist-worn device.
- 09:50-10:15 [Nicholas Greg](#) (United States) Circadian and infradian cycles of brain excitability and cardiac activity

**10:15-10:45 Coffee break in exhibition area**

## **10:45-12:45 Automated non-EEG devices and differential diagnosis (Chair: Christoph Baumgartner)**

- 10:45-11:00. [Christoph Baumgartner](#) (Austria). State of the art of non-EEG devices – introduction to the session.
- 11:00-11:35. [Roland D. Thijs](#) (The Netherlands): Wearables in the differential diagnosis between epilepsy and syncope. (IS)
- 11:35-12:10. [Saara Rissanen](#) (Finland): Reproducibility of wearable surface electromyography for myoclonus evaluation in progressive myoclonus epilepsy type 1
- 12: 10-12:45. [Ewan Nurse](#) (Australia): Multiday cycles of cardiac and cortical excitability are co-modulated at daily, weekly and monthly time scales

**12:45-14:00 Poster session and lunch break in exhibition area**

**14:00-15:15 Sponsored session (UCB)**

[Predicting seizures for the less severe patients – a dream or reality?](#)

Pro & con, followed by a panel discussion with Mark Richardson & Michael Sperling

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**15:15-15:30 Coffee break in exhibition area**

**15:30-16:00 How to improve the next edition of this congress?**

[Open discussion](#) (Chairs: Sándor Beniczky & Philippe Ryvlin)

**16:00-18:00 Telemedicine: are changes in practice caused by COVID-19 here to stay?  
(Chair: Mark Richardson)**

- 16:00-16:40. [Eric Anderson](#) (USA): Secondary/tertiary care perspective: World class telemedicine for epilepsy in the post-Covid era.
- 16:40-17:20. [Charles Lowe](#) (UK): Primary care perspective: How has Covid changed care for long-term health conditions?
- 17:20-18:00. [Michael Sperling](#) (USA): Epilepsy apps: are they really changing the game?